



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

PAGE 1 of 13

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA)
UNDERGROUND INJECTION CONTROL MINOR PERMIT MODIFICATION: CLASS II

Permit Number: MI-073-2D-0009

Facility Name: Fred Beutler #2

Pursuant to the provisions of the Safe Drinking Water Act, as amended (42 U.S.C. §300f et seq., commonly known as the SDWA) and implementing regulations promulgated by the USEPA at Parts 124, 144, 146 and 147 of Title 40 of the Code of Federal Regulations (40 CFR),

Summit Petroleum Corporation of Mt. Pleasant, Michigan

is hereby authorized to operate an existing injection well located in Michigan, Isabella County, T15N, R6W, Section 33, NE 1/4 Section, for injection into the Dundee Limestone at depths between 3707 feet and 3868 feet, upon the express condition that the permittee meet the restrictions set forth herein.

The purpose of the injection is limited to noncommercial brine disposal from production wells owned or operated by Summit Petroleum Corporation.

All references to Title 40 of the Code of Federal Regulations are to all regulations that are in effect on the date that this permit is effective.

This permit is a minor modification of an existing permit, which was signed on March 30, 1987. This permit shall become effective on JUL 12 2006 and shall remain in full force and effect during the operating life of the well, unless this permit is otherwise revoked, terminated, modified or reissued pursuant to 40 CFR §§144.39, 144.40 or 144.41. This permit shall also remain in effect upon delegation of primary enforcement responsibility to the State of Michigan, unless that State chooses to adopt this permit as a State permit. This permit will be reviewed at least every 5 years from the effective date specified above.

Signed and dated:

July 12, 2006
Jo Lynn Traub
For

Jo Lynn Traub
Director, Water Division

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity, otherwise authorized by this permit or rule, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any Primary Drinking Water Regulation pursuant to 40 CFR Part 142 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA), or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §144.39, §144.40, and §144.41. The filing of a request for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and §144.5, any information submitted to USEPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, USEPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in

40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- 1) The name and address of the permittee; and
- 2) Information which deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply - The permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and re-issuance or modification.
2. Need to Halt or Reduce Activity not a Defense - It shall not be a defense for a permittee in an enforcement action to state that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
3. Duty to Mitigate - The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
4. Proper Operation and Maintenance - The permittee shall at all times properly operate and maintain all facilities. Proper operation and maintenance includes effective performance and adequate funding, including appropriate quality assurance procedures.
5. Duty to Provide Information - The permittee shall furnish to the Director, within thirty (30) days, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required by this permit to be retained.
6. Inspection and Entry - The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;

- (b) Have access to and copy, at reasonable times, any records that must be retained under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring equipment), practices, or operations, regulated or required under this permit; and
- (d) Sample or monitor the injected fluids, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the SDWA, at any location.

7. Records

- (a) The permittee shall retain records and all monitoring information, including all calibration and maintenance records required by this permit, for a period of at least five (5) years from the date of the sample, measurement or report. The permittee shall maintain records of all data required to complete this permit application and any supplemental information submitted under 40 CFR §144.27, §144.28 and §144.31. These periods may be extended by request of the Director at any time.
- (b) The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of plugging and abandonment in accordance with the plugging and abandonment plan, contained in Attachment A of this permit. At the conclusion of the retention period, if the Director so requests, the permittee shall deliver the records to the Director.
- (c) Records of monitoring information shall include:
 - (i) The date, exact place, and the time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) A precise description of both sampling methodology and the handling of samples;
 - (iv) The date(s) analyses were performed;
 - (v) The individual(s) who performed the analyses;
 - (vi) The analytical techniques or methods used; and
 - (vii) The results of such analyses.

8. Notification Requirements

(a) Planned Changes - The permittee shall notify the Director at least thirty (30) days prior to any planned physical alterations or additions to the permitted facility, or changes in the injection fluids. An analysis of the new injection fluids shall be submitted to the Director in accordance with Permit Conditions (G)(2) and (G)(3).

(b) Commencing Injection - The permittee shall not commence injection until construction is complete and any remedial procedures described in Attachment B are complete, and;

(i) The permittee has submitted a report on the remedial work to the Director; and

(ii) The Director has inspected or otherwise reviewed the remedial work and notified the permittee in writing that he or she is in compliance with the conditions of this permit.

9. Anticipated Noncompliance - The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

10. Transfer of Permits - This permit is not transferrable to any person except after notice is sent to the Director and the requirements of 40 CFR §144.38 have been met. The Director may require modification or revocation of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the SDWA.

11. Compliance Schedules - Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.

12. Twenty-Four (24) Hour Reporting

(a) The permittee shall report to the Director any noncompliance which may endanger health or the environment. This information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall include the following as information:

- (i) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water; or
 - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
 - (b) A written submission shall also be provided as soon as possible but no later than five (5) days from the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
13. Other Noncompliance - The permittee shall report all other instances of noncompliance. The reports shall contain the information listed in Permit Condition (E)(12)(b).
 14. Other Information - If or when the permittee becomes aware that he or she failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit such facts or corrected information.
 15. Signatory Requirements - All reports or other information requested by the Director shall be signed and certified according to 40 CFR §144.32.
 16. Notice of Plugging and Abandonment - The permittee shall notify the Director at least thirty (30) days before conversion or abandonment of the well.
 17. Plugging and Abandonment - The permittee shall plug and abandon the well as provided in the plugging and abandonment plan contained in Attachment A of this permit. After a cessation of operation of two years, the owner or operator shall plug and abandon the well in accordance with the plan provided in Attachment A unless the operator fulfills the other requirements under 40 CFR §144.52(a)(6). The permittee shall notify the Director of plugging and abandonment in accordance with the reporting procedures in Permit Condition (G)(3)(d).
 18. Financial Responsibility - The permittee shall maintain financial responsibility and resources to plug and abandon the underground

injection well in accordance with 40 CFR §144.52(a)(7). The permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless he or she has previously submitted evidence of that alternative demonstration to the Director and the Director has notified him or her in writing that the alternative demonstration of financial responsibility is acceptable.

19. Insolvency

- (a) In the event of the bankruptcy of the trustee or issuing institution of the financial mechanism, or a suspension or revocation of the authority of the trustee institution to act as trustee or the institution issuing the financial mechanism to issue such an instrument, the permittee must submit an alternative demonstration of financial responsibility acceptable to the Director within sixty (60) days after such event.
- (b) An owner or operator must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he or she is named as debtor, as required under the terms of the guarantee.

20. Remedial Action

- (a) The permittee shall comply with the remedial action plan contained in Attachment B of this permit.
- (b) The permittee shall not commence injection until all remedial action has been taken in accordance with the plan contained in Attachment B and the requirements in Permit Condition (E)(8)(b) have been met.

21. Mechanical Integrity

- (a) The permittee must provide a mechanical integrity demonstration, in accordance with 40 CFR §146.8, within thirty (30) days of the effective date of this permit, unless mechanical integrity was demonstrated for the injection well after June 25, 1984.
- (b) A demonstration of mechanical integrity, in accordance with 40 CFR §146.8, shall be performed every five (5) years from the effective date of the last approved demonstration.

The permittee may continue operation only if the permittee has received written notice from the Director that such demonstration is satisfactory. The permittee shall notify the Director of his or her intent to demonstrate mechanical integrity at least thirty (30) days prior to such demonstration. In addition to the five (5) year demonstration, the Director has the authority to require the permittee to conduct a demonstration of the mechanical integrity of the well at any time.

- (c) All gauges used in mechanical integrity demonstrations shall be calibrated according to the National Bureau of Standards methods and be accurate to within 0.5% of full scale initially and annually thereafter. A copy of the calibration certificate shall be submitted to the Director on an annual basis.
- (d) The permittee shall cease injection if a loss of mechanical integrity as defined by 40 CFR §146.8 becomes evident during operation. Operations shall not be resumed until the permittee has complied with the provisions of this permit regarding mechanical integrity demonstration and testing.
- (e) The permittee shall notify the Director of the loss of mechanical integrity, in accordance with the reporting procedures in Permit Condition (G)(3)(d).

22. Restriction on Injected Substances - The permittee shall not inject any hazardous substances, per 40 CFR Part 261, at any time during the operation of the facility, and further, no substances other than those noted in the permit application shall be injected.

F. CONSTRUCTION REQUIREMENTS

- 1. Casing and Cementing - Injection wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The casing and cement used in the construction of the well are contained in Attachment C.
- 2. Tubing and Packer Specifications - Injection shall only take place through tubing with a packer set within the casing at the bottom of the long string casing. Tubing and packer specifications shall be as represented in engineering drawings contained in Attachment C of this permit. Any proposed changes shall be submitted by the applicant for the approval of the Director before installation.

3. Wellhead Specifications - For every injection well, the operator shall provide a one-fourth (1/4) to one-half (1/2) inch female fitting, with cut-off valve, to the tubing at the wellhead so that the amount of injection pressure being used may be measured by a representative of the USEPA by attaching a gauge having a one-fourth (1/4) to one-half (1/2) inch male fitting.
4. Formation Data - Data on the injection and confining zones are contained in Attachment D of this permit.

G. OPERATING, MONITORING AND REPORTING REQUIREMENTS

1. Operating Requirements

(a) Injection Pressure Limitation

- (i) Beginning on the effective date of this permit, the permittee is authorized to operate the injection well, subject to the limitations and monitoring requirements set forth herein. The injection pressure and injected fluid shall be limited and monitored as specified in Attachment E.
- (ii) Injection at a pressure which initiates fractures in the confining zone or causes the movement of injection or formation fluids into or between underground sources of drinking water is prohibited.
- (iii) Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.
- (iv) The annulus between the tubing and the long string casing shall be filled with a fluid approved by the Director. A positive pressure shall be maintained on the annulus.

2. Monitoring Requirements

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Grab samples shall be used to obtain a representative sample of the fluid to be analyzed. Attachment E describes the sampling location and required parameters for injection fluid analysis.

- (b) Analytical Methods - Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited and described in Table I of 40 CFR §136.3 or in Appendix III of 40 CFR Part 261 or by other methods that have been approved by the Director.
 - (c) Injection Fluid Analysis - The nature of the injection fluids shall be monitored quarterly for the parameters specified in Attachment E, except that specific gravity shall be monitored monthly. An initial analysis of the injection fluid is contained in Attachment E.
 - (d) Injection Pressure, Annulus Pressure, Flow Rate and Cumulative Volume - Injection pressure, annulus pressure, flow rate and cumulative volume shall be recorded at least weekly. All gauges used in monitoring shall be calibrated in accordance with Permit Condition (E)(21)(c).
3. Reporting Requirements - Copies of the monitoring results and all other reports shall be submitted to the Director at the following address:
- U.S. Environmental Protection Agency
Region V
77 W. Jackson Boulevard
Chicago, Illinois 60604
Attn: WU-16J
- (a) Monthly Reports - Monitoring results obtained during each week shall be recorded on a form similar to that contained in Attachment F. Forms shall be submitted at the end of each month and shall be postmarked no later than the 10th day of the month following the sampling period. The first report shall be sent no later than the 10th day of the month following the month in which injection commences. This report shall include the weekly measurements of injection pressure, annulus pressure, flow rate and cumulative volume, and monthly measurements of the specific gravity of the injected fluids as required in Attachment E.
 - (b) Quarterly Reports - Monitoring results obtained each quarter shall include the measurements of injected fluid characteristics as required in Attachment E.
 - (c) After one year from commencement of injection, the permittee may request a change in the frequency of monitoring if the permittee can demonstrate that there has not been and will not be significant variation in the information generated.

(d) Reports on Well Tests, Workovers, and Plugging and Abandonment
The applicant shall provide the Director with the following reports and test results within sixty (60) days of completion of the activity:

- (i) Mechanical integrity tests;
- (ii) Logging or other test data;
- (iii) Well workovers (using EPA Form 7520-12 in Attachment F), and
- (iv) Plugging and abandonment

H. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

Any person who operates this well in violation of permit conditions is subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to such actions under the Resource Conservation and Recovery Act. Any person who willfully violates permit condition may be subject to criminal prosecution.

ATTACHMENT A

OMB No. 2040-0042

Approval Expires 4/30/07

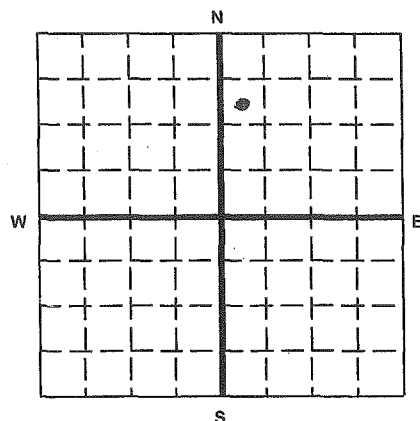
United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

Name and Address of Facility

FRED E BEUTLER
SHERMAN TWP ISABELLA COUNTY, MI

Name and Address of Owner/Operator

SUMMIT PETROLEUM CORPORATION
P O BOX 365 MT PLEASANT, MI 48804-0365Locate Well and Outline Unit on
Section Plat - 640 Acres

State

Michigan

County

Isabella

Permit Number

MI4741/MI073 2D0009

Surface Location Description

SW 1/4 of NW 1/4 of NE 1/4 of Section 33 Township 15n Range 6w

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface

Location 330 ft. from (N/S) S Line of quarter section
and 330 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☒ Individual Permit
☐ Area Permit
☐ Rule

Number of Wells 1

Lease Name

FRED E BEUTLER

WELL ACTIVITY

- ☐ CLASS I
☒ CLASS II
☒ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☐ CLASS III

Well Number #2

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
10	41#		605	
6.625	17#		1747	
5.5	15#		3707	

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	4" O.H.	5.5	6.625				
Depth to Bottom of Tubing or Drill Pipe (ft)	3868	3700	1530				
Sacks of Cement To Be Used (each plug)	21	40	265				
Slurry Volume To Be Pumped (cu. ft.)	1.18cuft	1.18cuft	1.18cuft				
Calculated Top of Plug (ft.)	3700	3400	4				
Measured Top of Plug (if tagged ft.)	3700	3400	surface				
Slurry Wt. (Lb./Gal.)	15.6	15.6	15.6				
Type Cement or Other Material (Class III)	CL/A	CL/A	CL/A				

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
4.0" o.h. 3707	3868		

Estimated Cost to Plug Wells

Ten Thousand Dollars (\$10,000.00)

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Robert J Long President

Signature

Date Signed

06/05/2006

PLUGGING ABANDONMENT CONSTRUCTION

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Surface -

Surface Casing
10" @ 605'

Intermediate Csg.
6.625" @ 1747'

Packer Depth
3600'

Long String Csg.
5-1/2" @ 3707'

* Depth
3868'

*USDW Base Plug
Interval
N/A

*Third Plug Interval
N/A

*Middle Plug Interval
3400' - 3700'

***Long String Cut/Rip
Point Plug Interval**

Bottom Plug Depth
3700' - 3868'

***Mechanical Plug Depth**

Surface Casing
605'

USDW Base
1480'

*Intermediate
Cut/Rip Depth

*Intermediate Csg.
1747'

*Long String Csg
Cut/Rip Depth

Long String Csg.
3707'

Depth
3868'

**** Add Any Additional Information**

* May not Apply

[illegible]

ATTACHMENT B

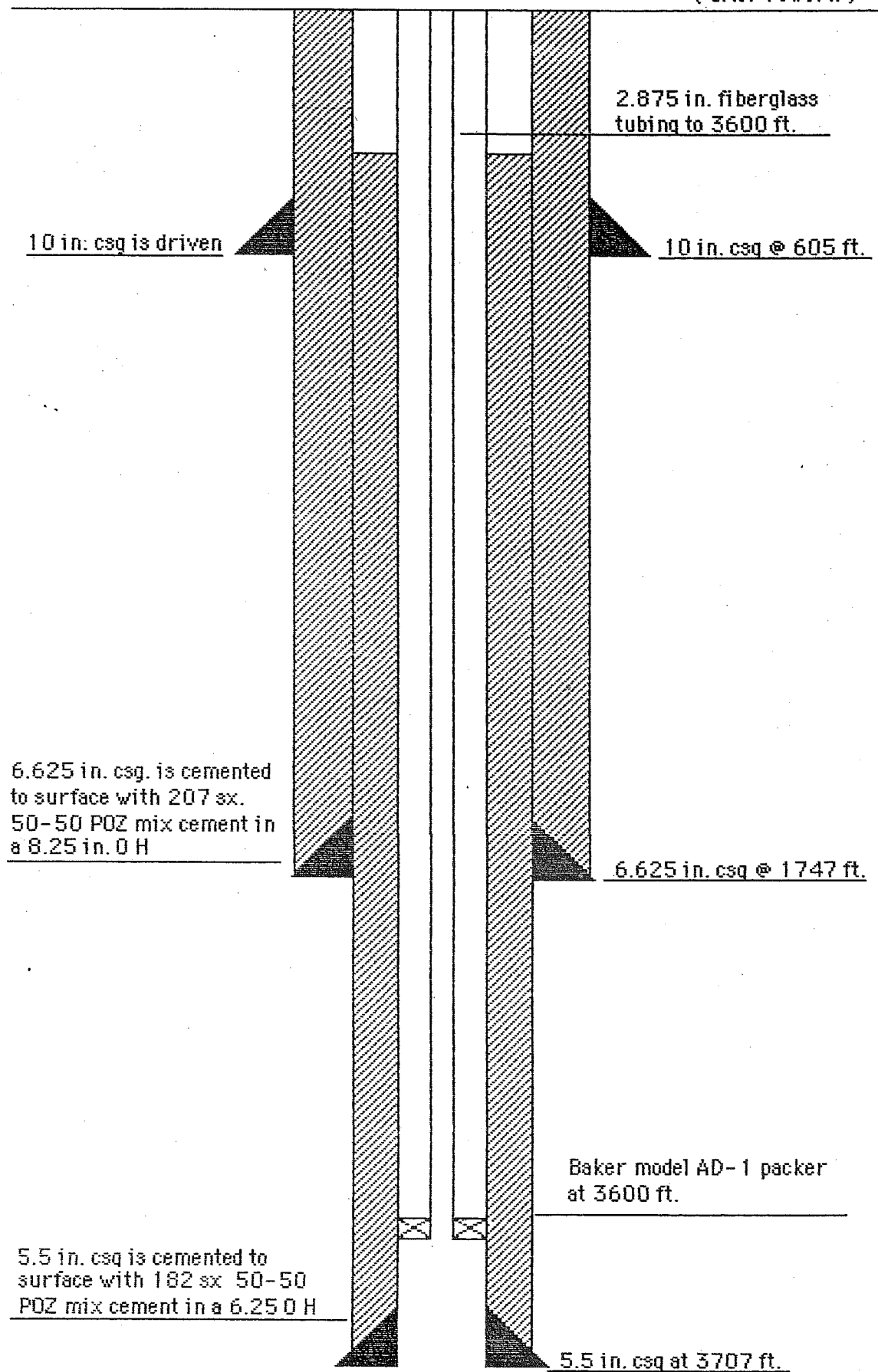
! Remedial Action Plan

Should upward fluid migration occur through the well bore of any previously unknown, improperly plugged or unplugged well in the area of review due to injection of permitted fluids, injection will be shut-in until proper plugging can be accomplished. Any flowage from such undiscovered wells will be considered noncompliance with this permit. Should any problem develop in the casing of the injection well, injection will be shut-in until such repairs can be made as to remedy the situation.

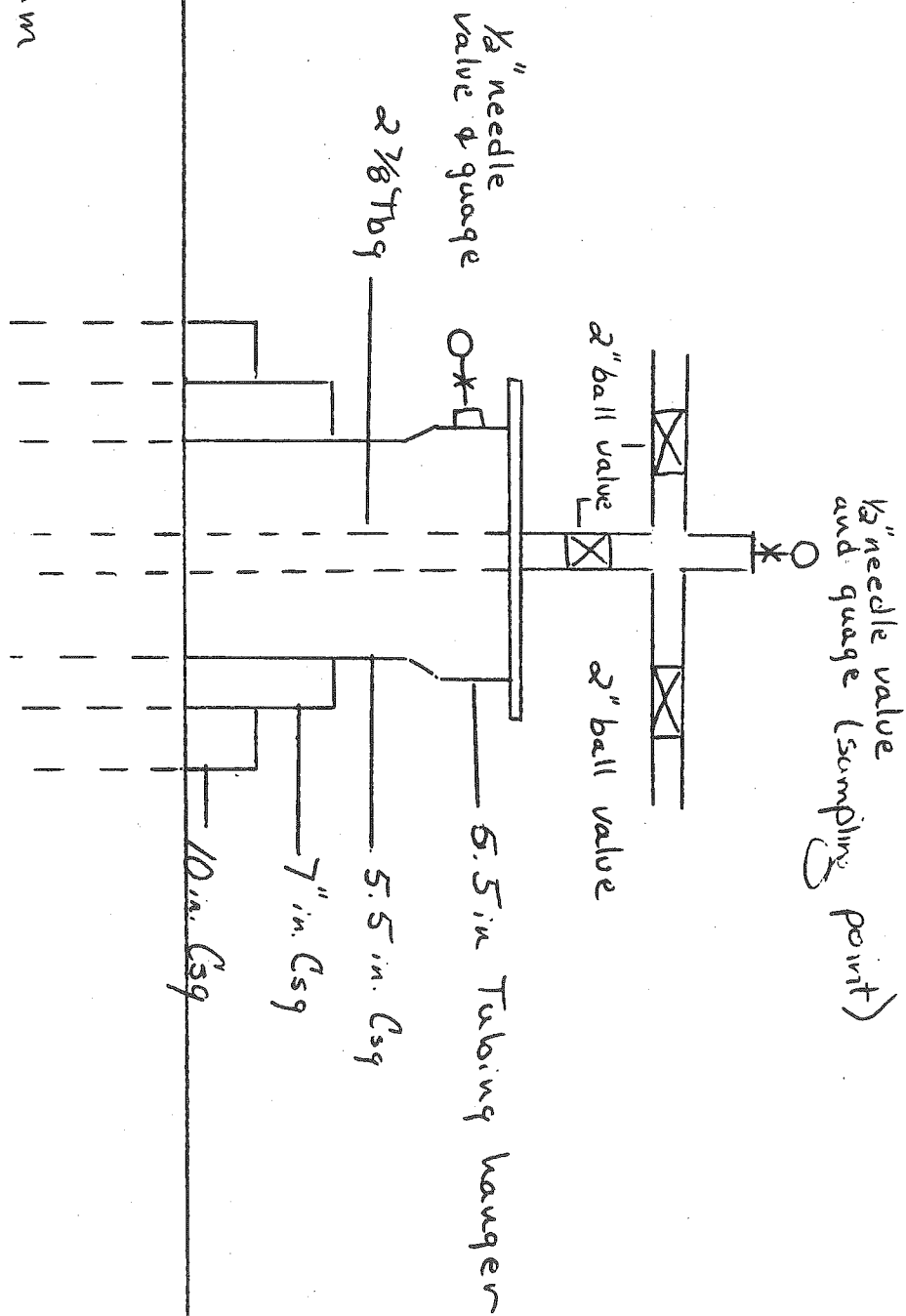
ATTACHMENT C

Fred E. Beutler #2

(after rework)



T D of well is 3868 ft.



ATTACHMENT D

Geological Data on Injection and Confining Zones

In Sherman Twp., the Dundee is overlain by the Bell Shale and underlain by anhydrite of the Detroit River group. The top of the Dundee occurs at a depth of \pm 3710 feet and has a thickness \pm 203 feet. The Dundee formation is composed of gray to brown limestone.

The interval in which brine water will be disposed of occurs \pm 2 ft. from the top of the Dundee zone, from 3712 - 3913 ft.

The zone is confined at the top by tightly packed limestone and Bell Shale. The lower part of the zone is confined at the bottom by the loss of porosity by the infilling of vugs with calcite and dolomite cement, this becomes the anhydrite of the Detroit River Group.

ATTACHMENT E

OPERATING, MONITORING AND REPORTING REQUIREMENTS

<u>Characteristic</u>	<u>LIMITATION</u>	<u>MINIMUM MONITORING REQ.</u>		<u>MINIMUM REPORTING REQUIREMENTS</u>
		<u>Freq.</u>	<u>Type</u>	
*Injection Pressure	912.0 psig	weekly		monthly
Annulus Pressure		weekly		monthly
Flow Rate		weekly		monthly
Cumulative Volume		weekly		monthly
Specific Gravity		monthly	grab	monthly
**Chemical Composition of Injected Fluid		quarterly	grab	quarterly
Total Dissolved Solids		quarterly	grab	quarterly
pH		quarterly	grab	quarterly
Resistivity, ohm-meters @75 °F		quarterly	grab	quarterly

SAMPLING LOCATION: at the wellhead as shown in Attachment C.

*The limitation on wellhead pressure serves to prevent confining-formation fracturing. This limitation was calculated using the following formula: $(.8 \text{ psi/ft} - (0.433 \text{ psi/ft (specific gravity)})) \times \text{depth}$. The maximum wellhead pressure is dependent upon depth and specific gravity of the injected fluid. The Dundee Limestone at 3707 feet was used as the depth and an anticipated specific gravity of 1.27 was used for the injected fluid.

**Chemical composition analyses shall include, but not be limited to, the following: Sodium, Calcium, Magnesium, Barium, Total Iron, Chloride, Sulfate, Carbonate, Bicarbonate and Sulfide.



SOUTHERN PETROLEUM LABORATORIES, INC.

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EPA BRINE WATER ANALYSIS

DATE: June 1, 1985
SUBMITTED ON: May 24, 1985
LOCATION: F.E. Beulter #2 P.N. 04741
Formation: Dundee
COMPANY: Jack Long

Specific Gravity	1.220
PH	5.44
Chlorides	193,000 Mg/L
Total Hardness (CaCO3)	126,000 Mg/L
Total Iron	5.3 Mg/L
Bicarbonate	56 Mg/L
Barium	NIL
Calcium	40,300 Mg/L
Magnesium	6,100 Mg/L
Sodium	62,400 Mg/L
Sulfide	NIL
Sulfate	160 Mg/L
Total Dissolved Solids (Calculated)	302,000 Mg/L

Southern Petroleum Laboratories

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ATTACHMENT F

Year _____ Month _____

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U. S. ENVIRONMENTAL PROTECTION AGENCY MONTHLY MONITORING REPORT
FOR CLASS II INJECTION WELLS

UIC PERMIT NUMBER: _____

Please complete and submit this report at the end of each month. This report must be postmarked no later than the 10th day of the following month.

check one --> ☐ EOR ☐ SWD ☐ HS

OPERATOR NAME _____

ADDRESS _____

WELL NAME _____

CITY/STATE/ZIP _____

WELL COUNTY _____

(AREA CODE) PHONE _____

MONTHLY REQUIREMENTS

WEEK & DATE	INJECTION PRES. (psig)	ANNULUS PRES. (psig)	FLOW RATE (Barrels per day)	CUMMULATIVE VOLUME (Barrels)
1				
2				
3				
4				
5				
AVERAGE				XXXXXXXXXXXXXXXXXXXXX
				XXXXXXXXXXXXXXXXXXXXX
HIGHEST VALUE				XXXXXXXXXXXXXXXXXXXXX
				XXXXXXXXXXXXXXXXXXXXX
LOWEST VALUE				XXXXXXXXXXXXXXXXXXXXX
				XXXXXXXXXXXXXXXXXXXXX

Specific Gravity of Injected Fluids: _____

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR Section 144.32).

NAME AND OFFICIAL TITLE
(please type or print)

SIGNATURE

DATE SIGNED

Year _____ Quarter _____

U. S. ENVIRONMENTAL PROTECTION AGENCY QUARTERLY MONITORING REPORT MI-073-2D-0009
FOR CLASS II INJECTION WELLS Page F-3 of 4

UIC PERMIT NUMBER _____

Please complete and submit this report at the end of each quarter. This report must be postmarked no later than the 10th day of the following months:

April-end of 1st quarter October-end of 3rd quarter
July- end of 2nd quarter January-end of 4th quarter

check one --> ☐ EOR ☐ SWD ☐ HS

OPERATOR NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

WELL NAME _____

WELL COUNTY _____

(AREA CODE) PHONE _____

QUARTERLY REQUIREMENTS

Attach the actual laboratory analysis of the following parameters:

Total Dissolved Solids: in parts per million (ppm)

pH: no units

Resistivity: in ohm - meters at 75° Fahrenheit

Chemical Composition of Injected Fluids:

Sodium: in ppm

Calcium: in ppm

Magnesium: in ppm

Barium: in ppm

Iron (total): in ppm

Chloride: in ppm

Sulfate: in ppm

Carbonate: in ppm

Bicarbonate: in ppm

Sulfide: in ppm

Other Chemicals: in ppm

Comments: _____

Date of Sampling: _____

Sample Location: _____

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR Section 144.32).

NAME AND OFFICIAL TITLE
(please type or print.)

SIGNATURE

DATE SIGNED



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

WELL REWORK RECORD

MI-073-2D-0009

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NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CONTRACTOR

**LOCATE WELL AND OUTLINE UNIT ON
SECTION PLAT -- 640 ACRES**

STATE

COUNTY

PERMIT NUMBER.

SURFACE LOCATION DESCRIPTION

% OF

4 OF

% SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface
Location _____ ft. from (N/S) _____ Line of quarter section
and _____ ft. from (E/W) _____ Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal
- ☐ Enhanced Recovery
- ☐ Hydrocarbon Storage

Lease Name

Total Depth Before Rework**Total Depth After Rework**

Date Rework Commenced

Date Rework Completed

TYPE OF PERMIT

☐ Individual
☐ Area
Number of Wells _____

Well Number

WELL CASING RECORD — BEFORE REWORK

[illegible]

WELL CASING RECORD — AFTER REWORK (Indicate Additions and Changes Only)

[illegible]

**DESCRIBE REWORK OPERATIONS IN DETAIL
USE ADDITIONAL SHEETS IF NECESSARY**

WIRE LINE LOGS, LIST EACH TYPE

Log Types

Logged intervals

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED _____